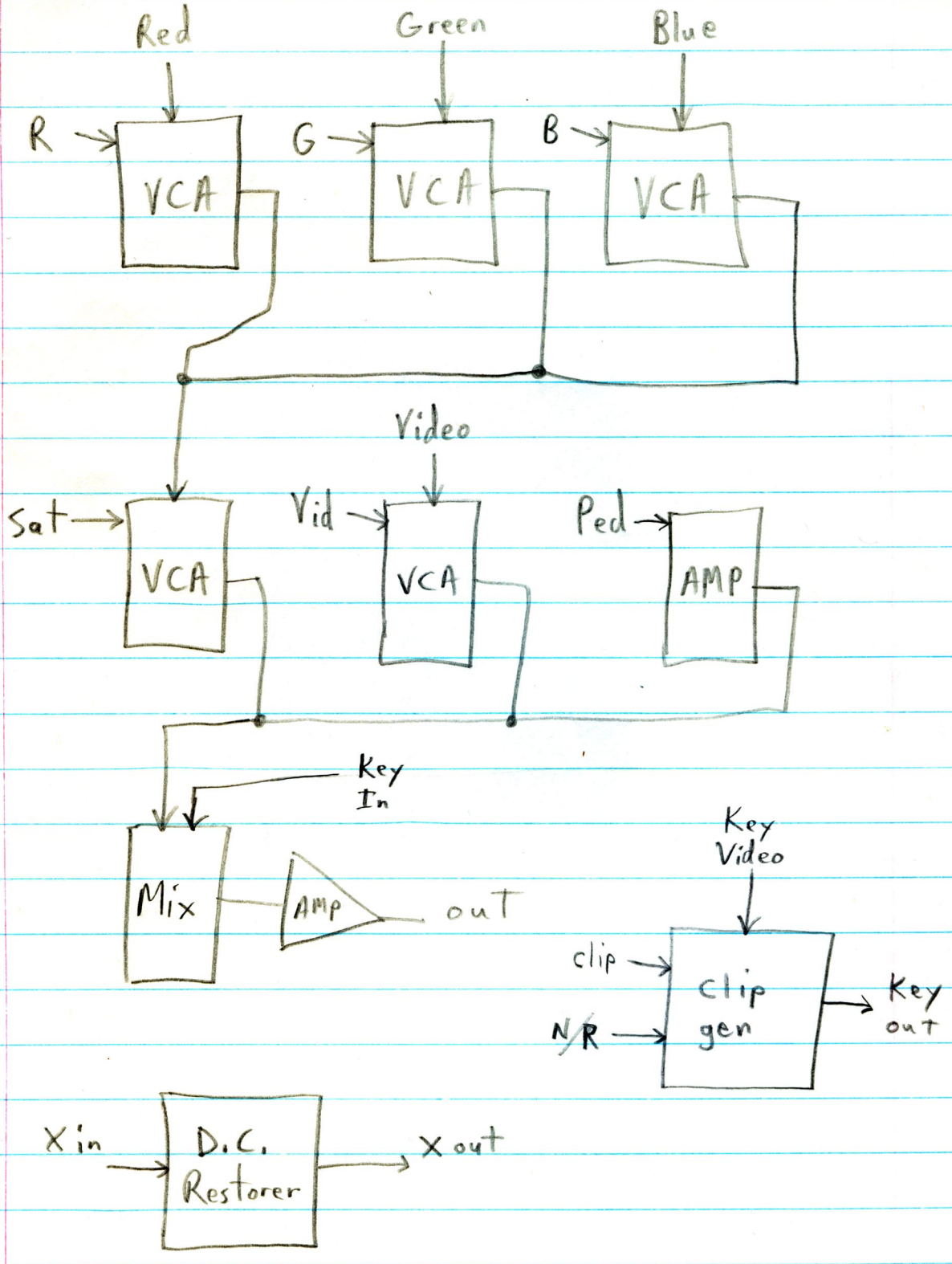
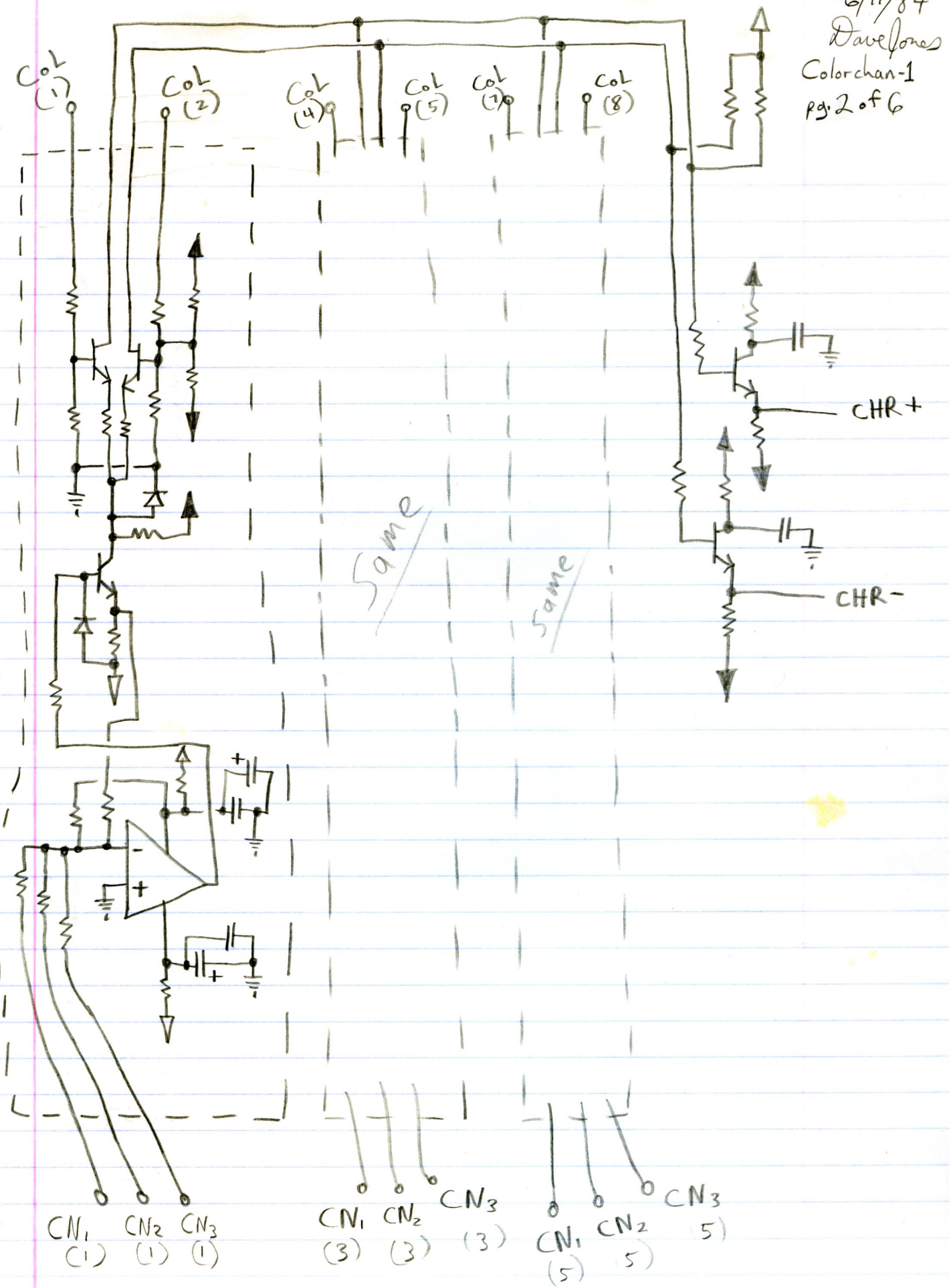
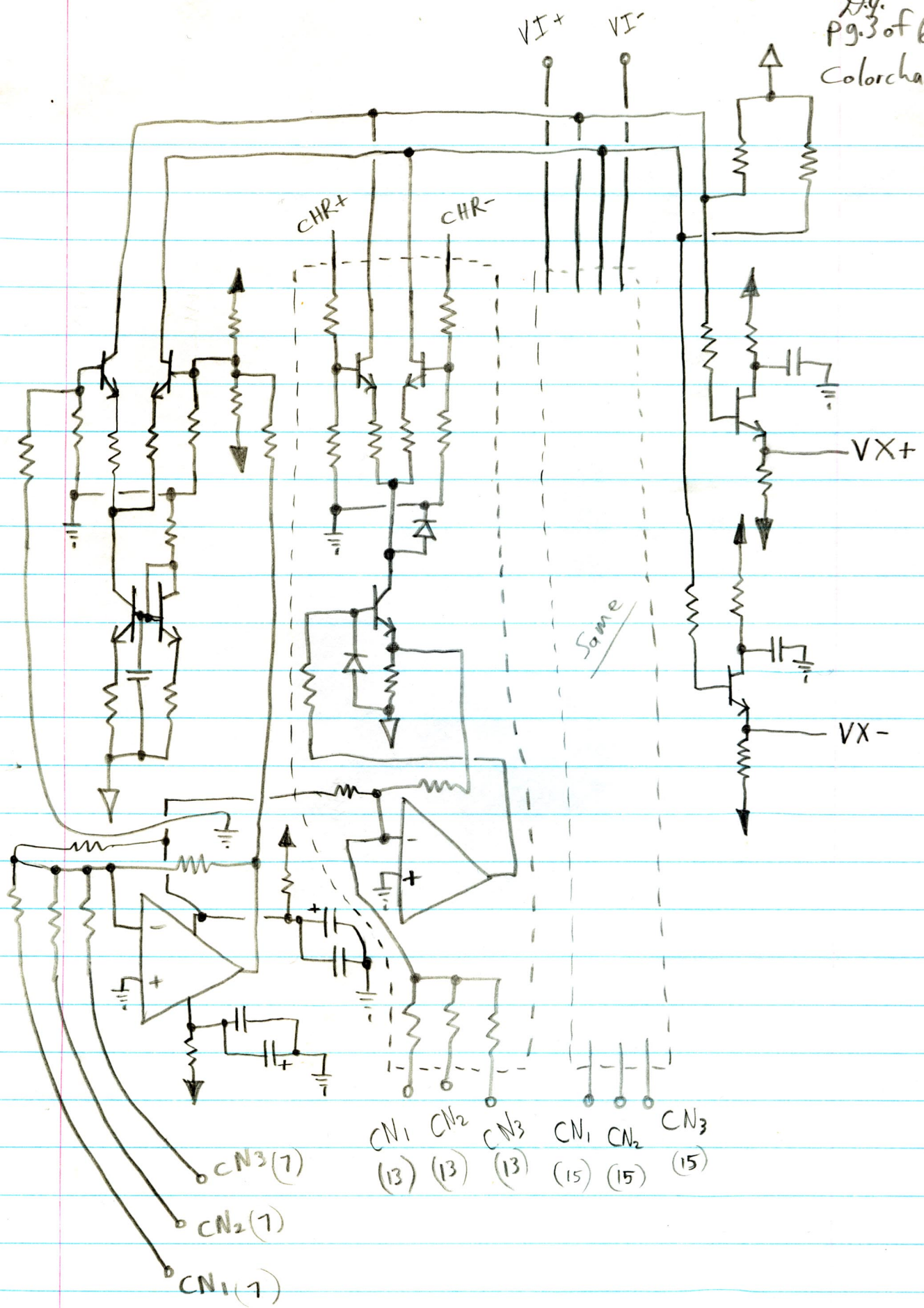
6/11/84
DG.
Colorchan-1
pg. 1 of 6



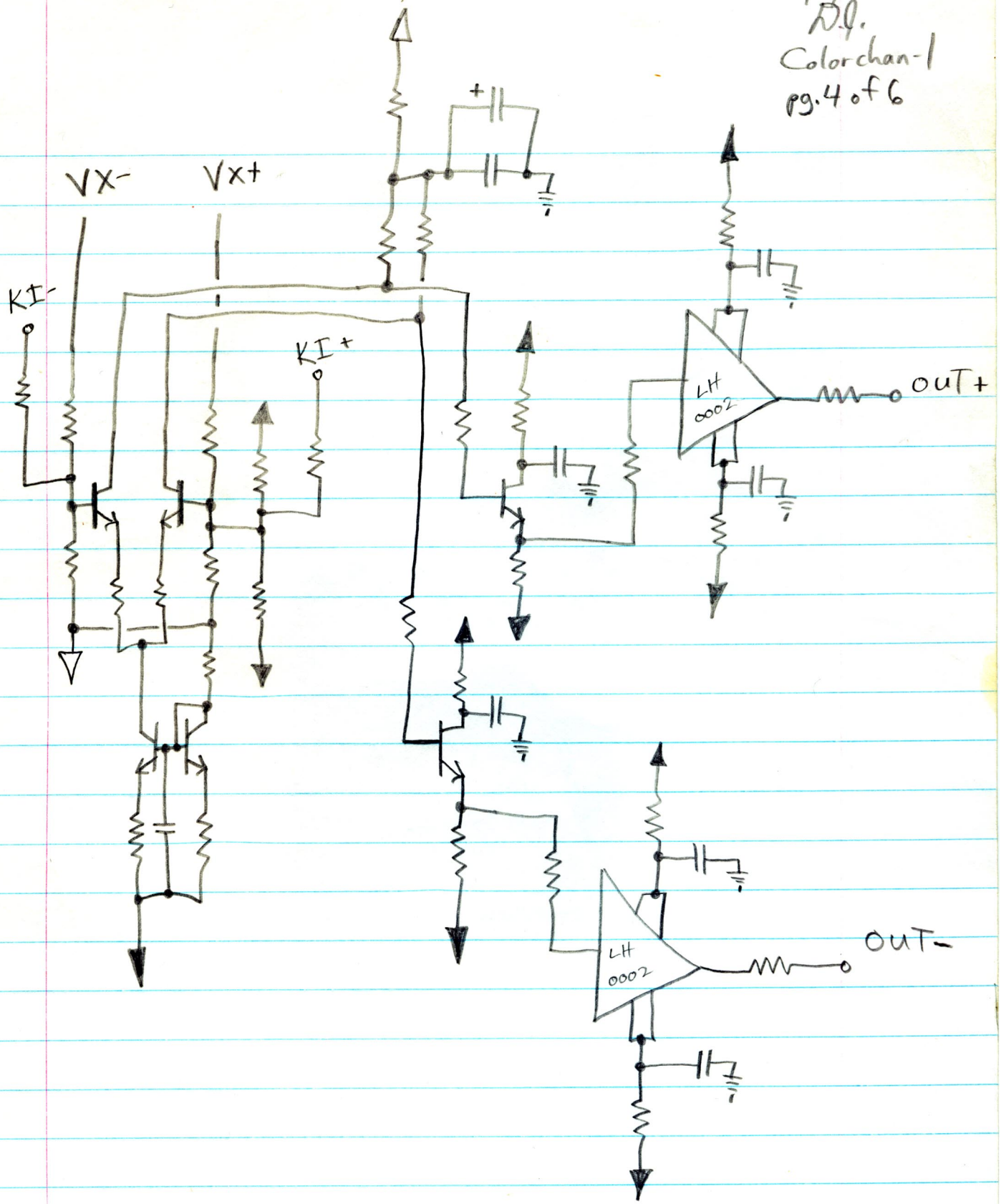
6/11/84
Dave Jones
Colorchan-1
pg. 2 of 6



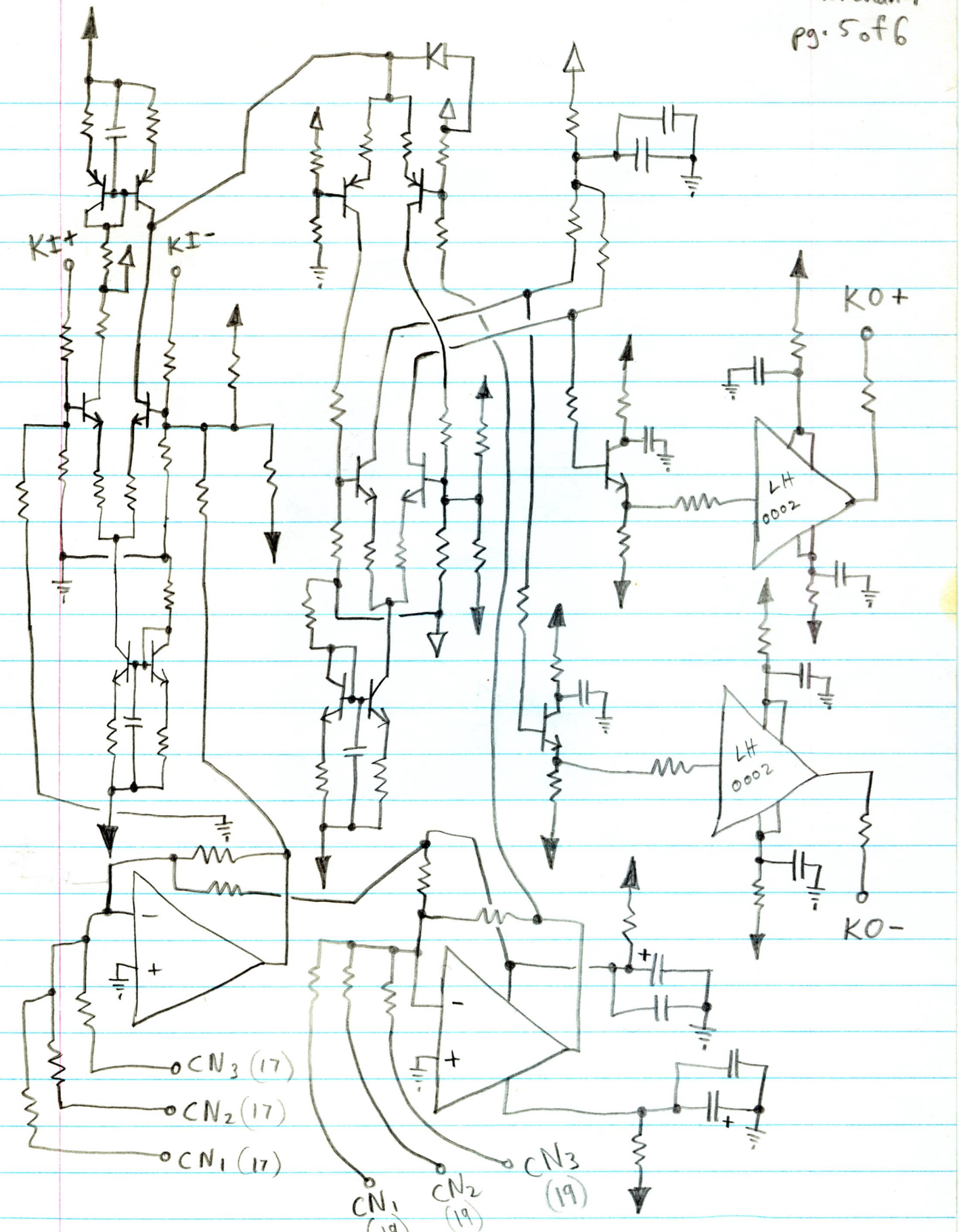
6/11/84
D.G.
Pg. 3 of 6
Colorchan-1



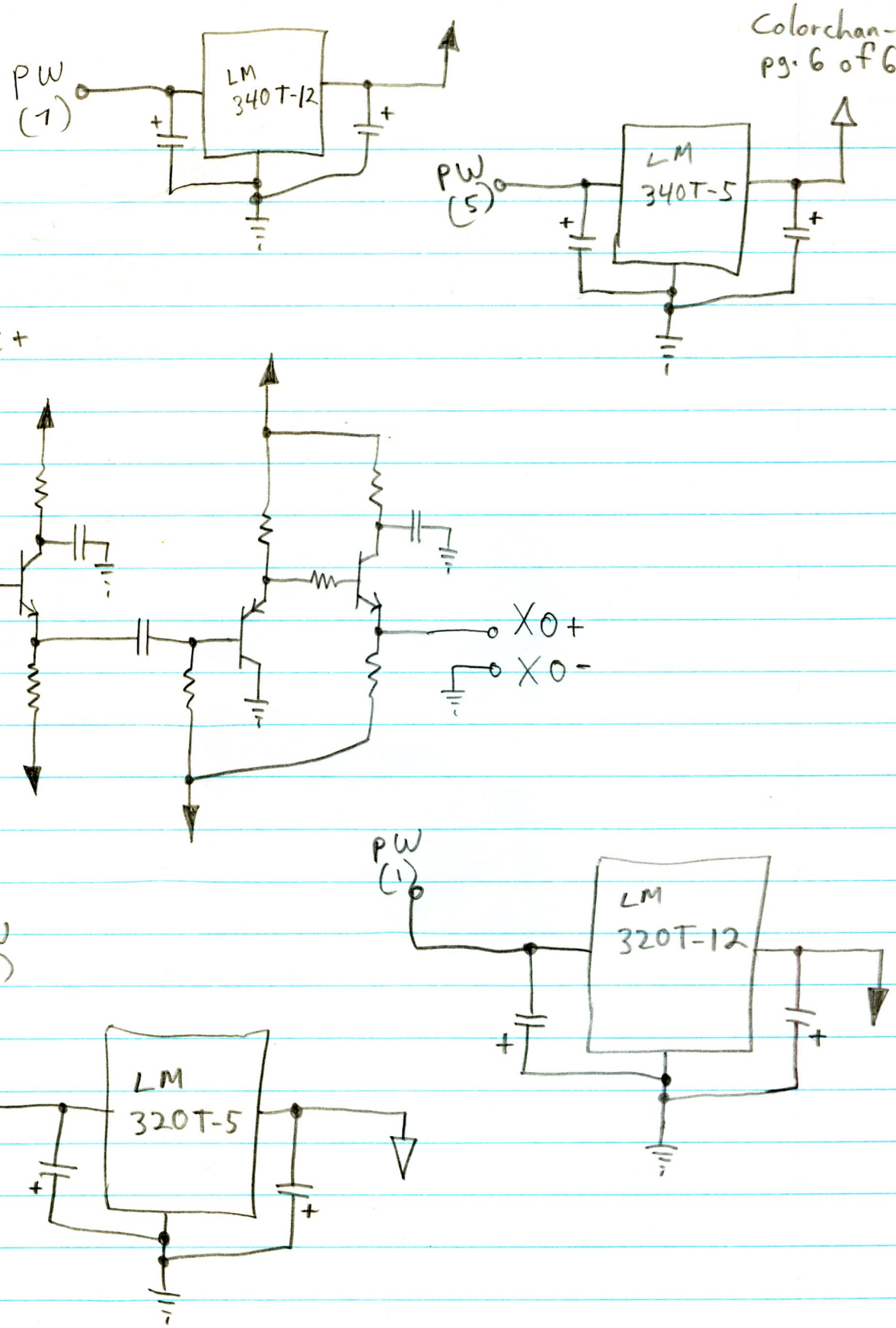
6/11/84
D.J.
Colorchan-1
pg. 4 of 6



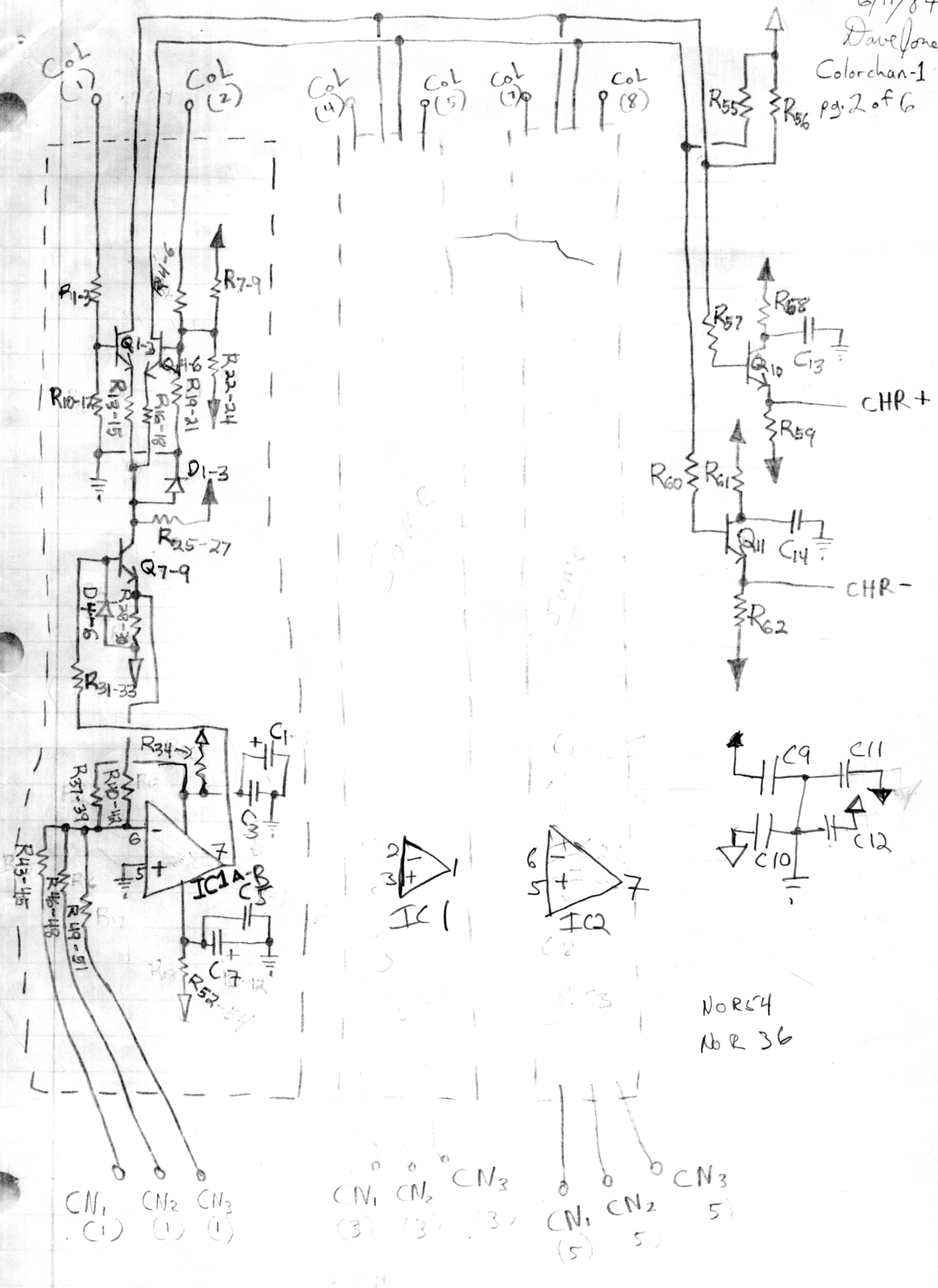
6/11/84 D.J.
Colorchan-1
pg. 5 of 6



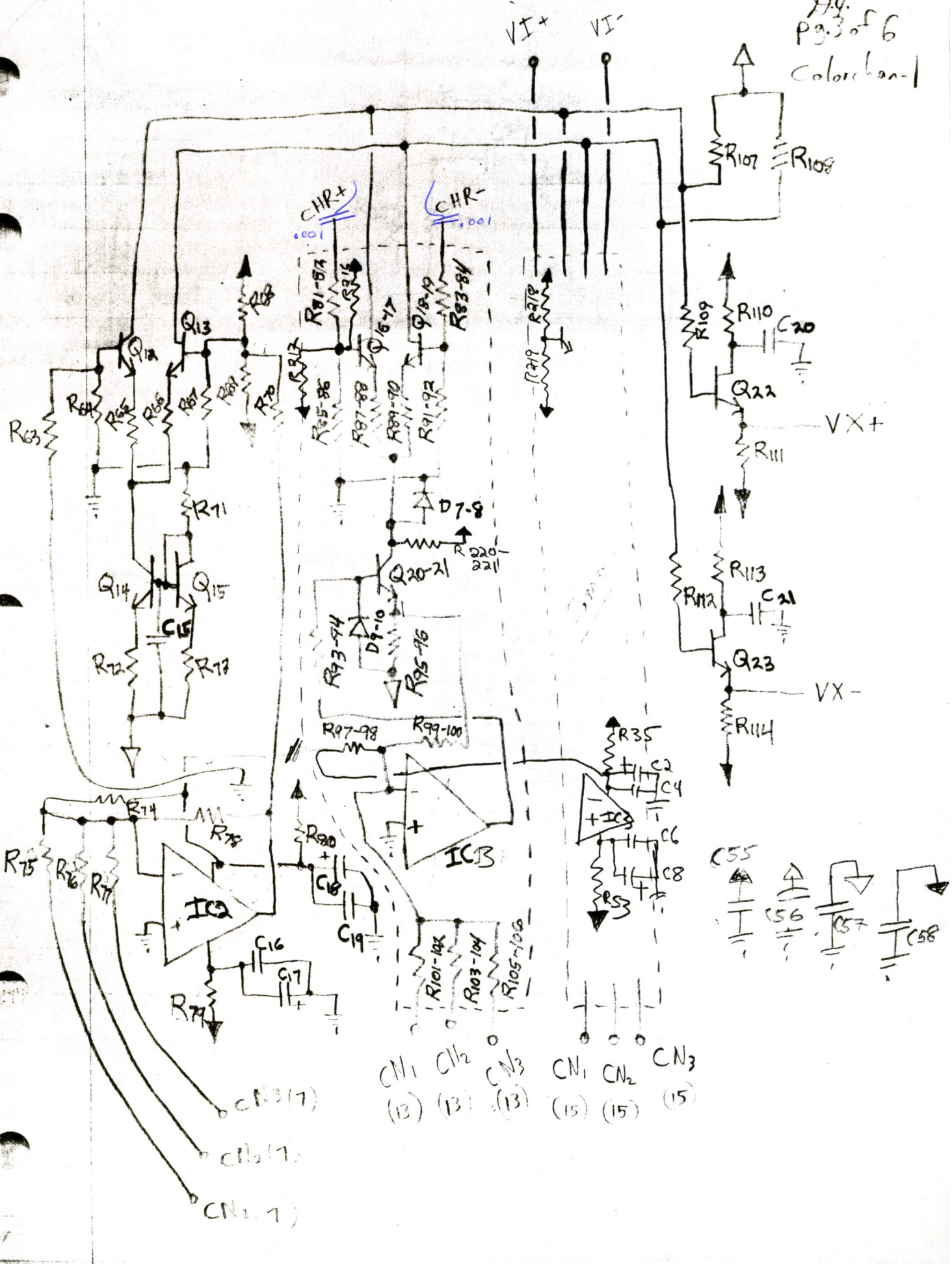
6/11/84 DJ.
Colorchan-1
pg. 6 of 6



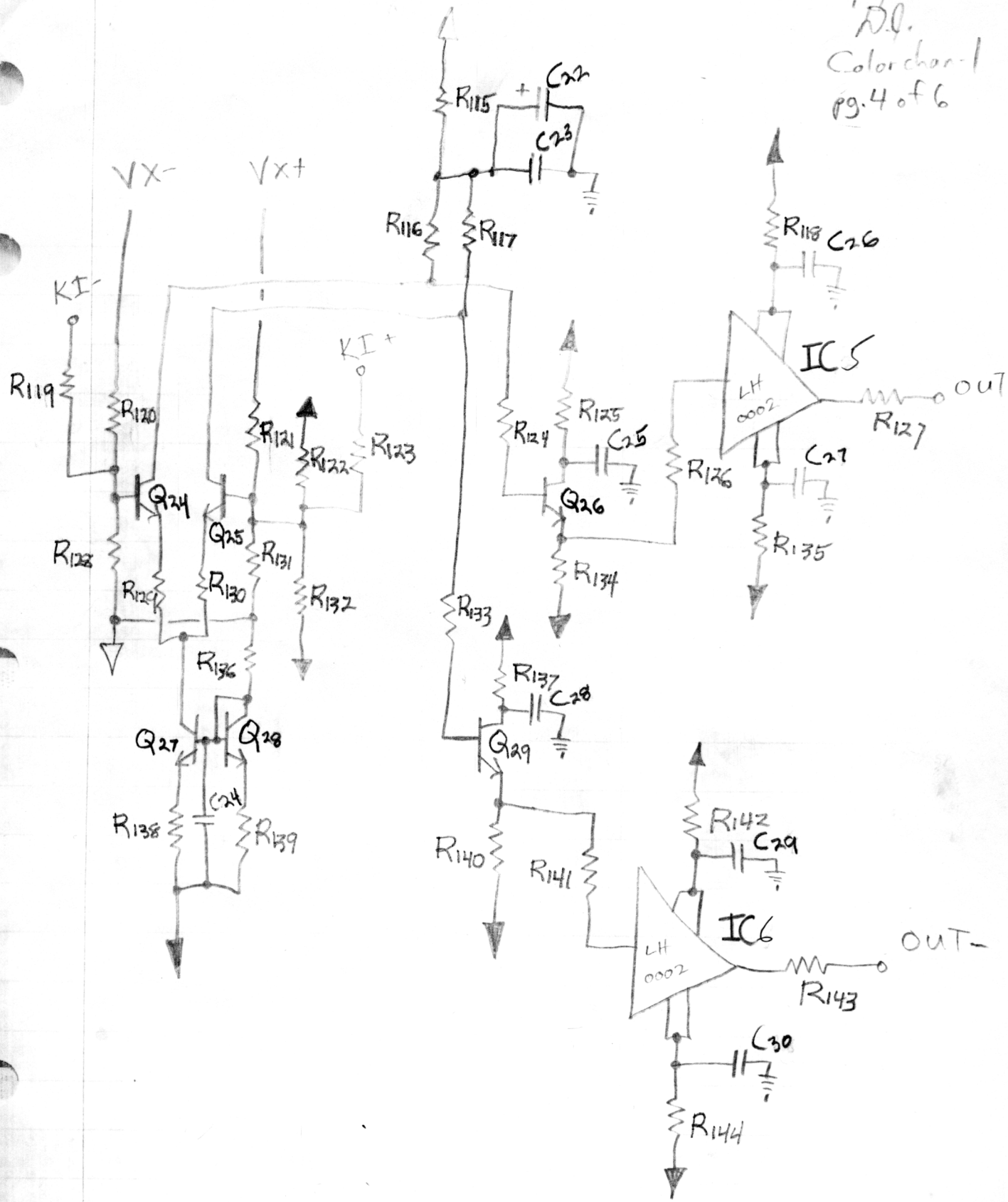
6/11/84
Dave Jones
Colorchan-1
pg. 2 of 6

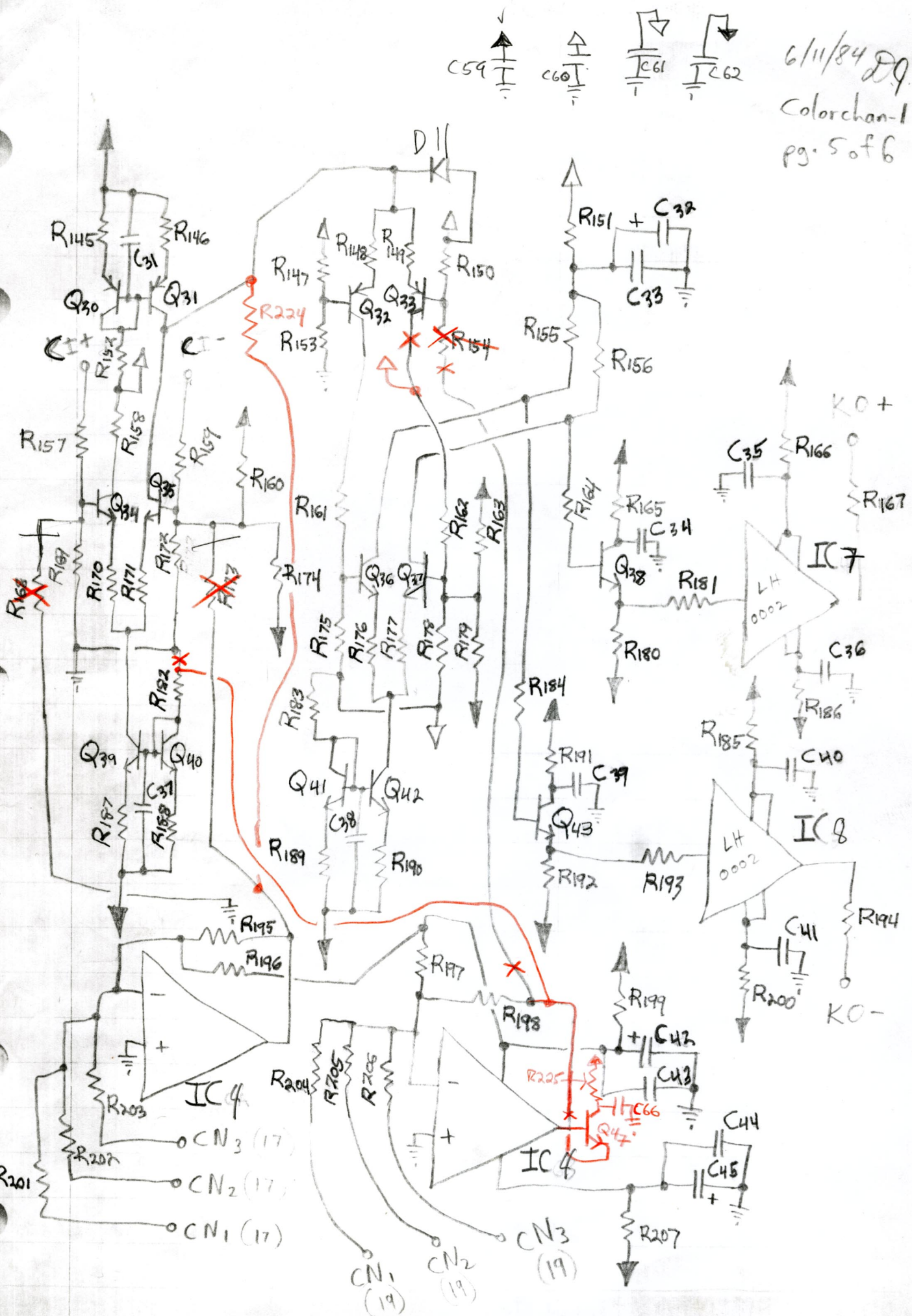


6/11/84
D.G.
P3.3 of 6
Colorchan-1

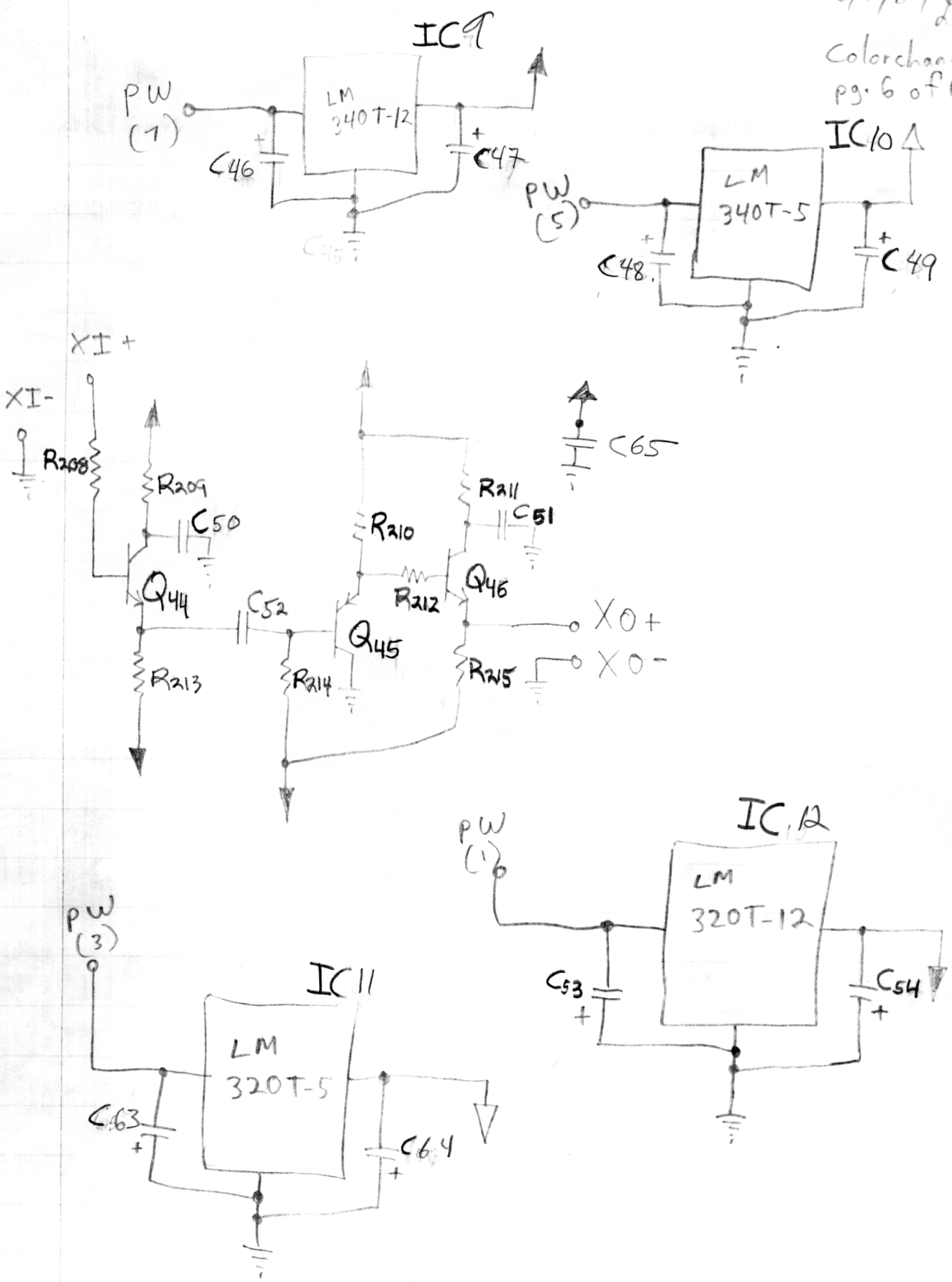


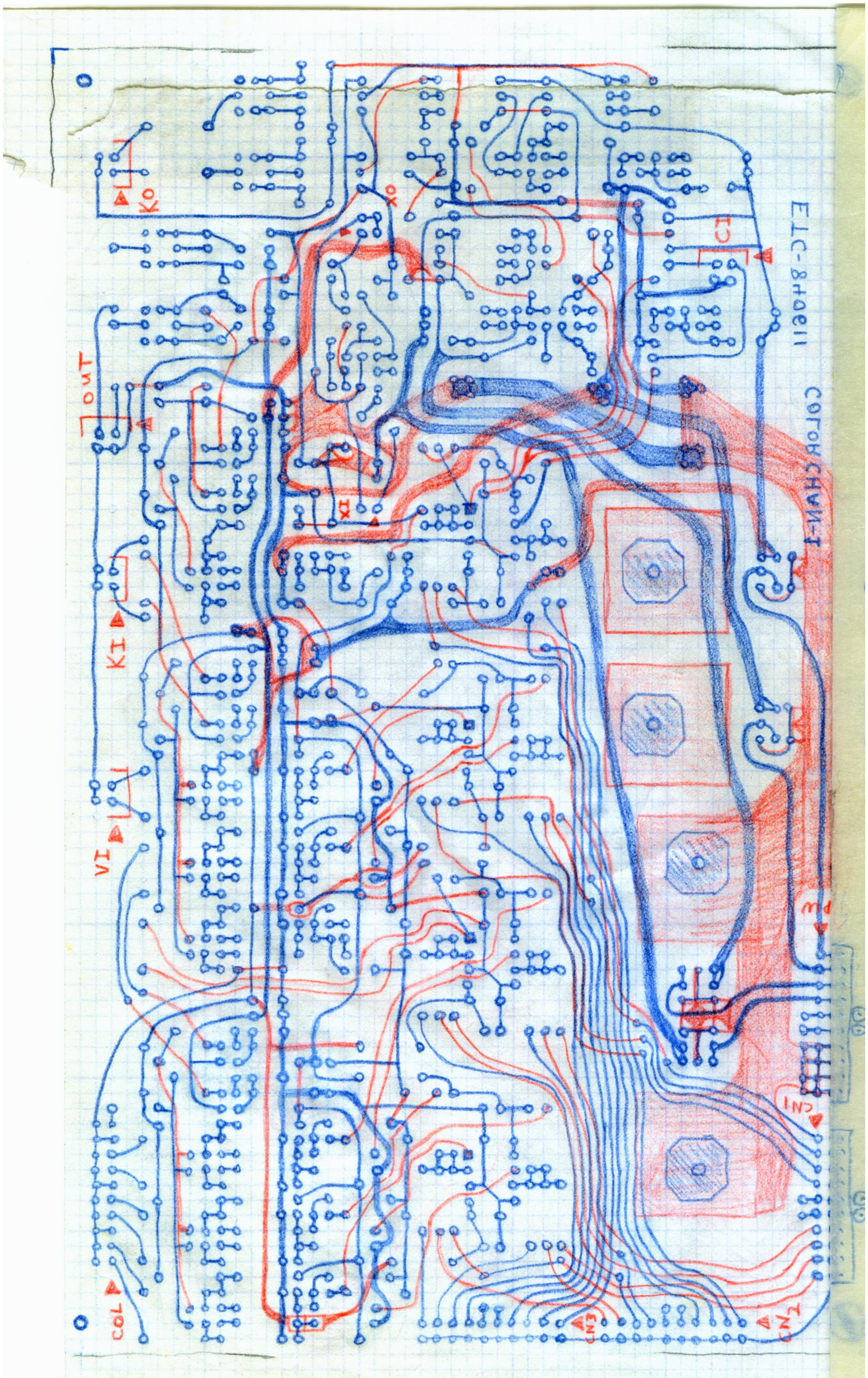
6/11/84
D.O.
Colorchar-1
pg. 4 of 6



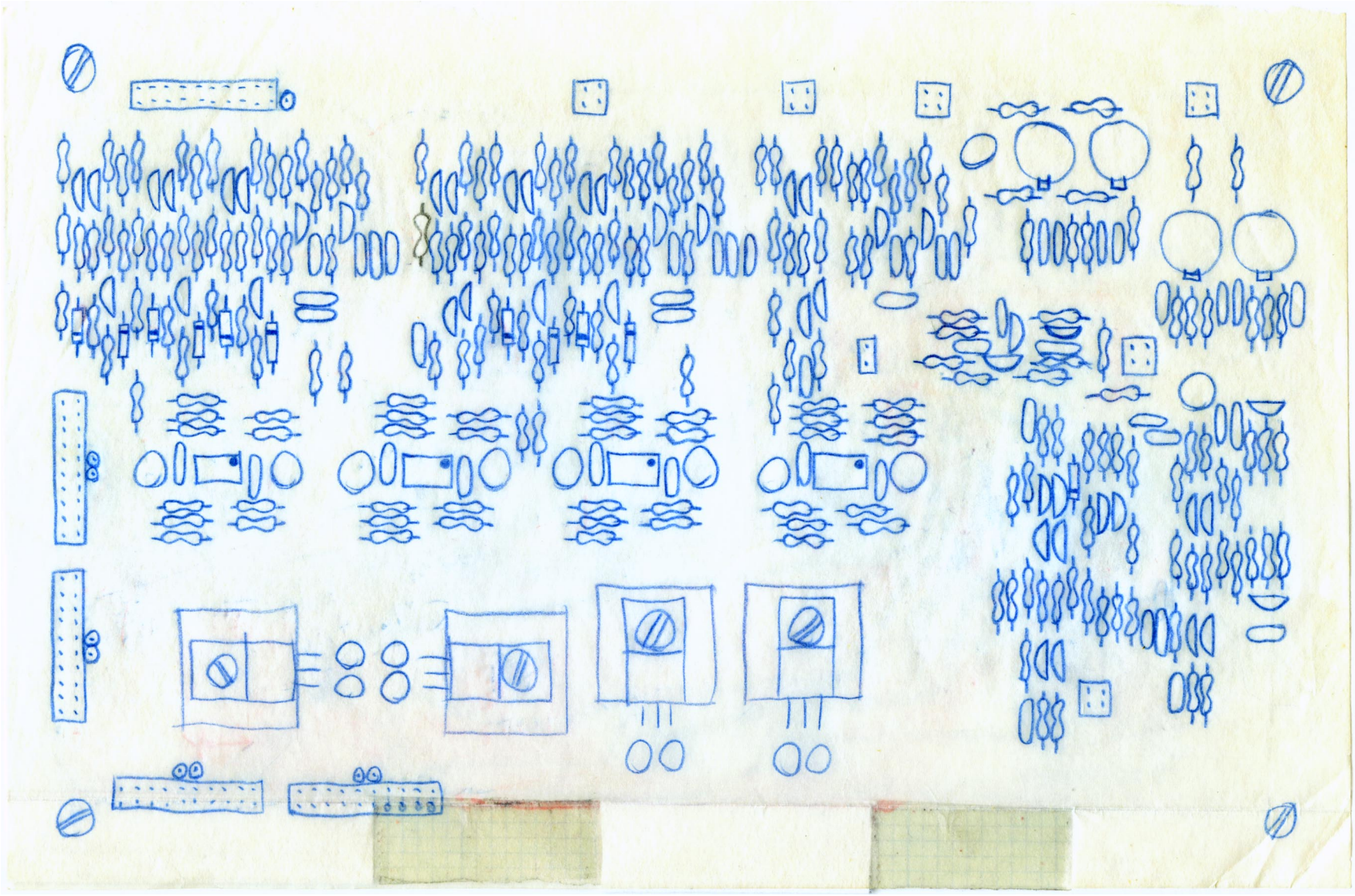

C59
C60
C61
C62
6/11/84 DJ
Colorchan-1
pg. 5 of 6
D1
R145
R146
C31
Q30
Q31
R147
R148
R149
R150
R151
C32
C33
R224
R153
Q32
Q33
R154
R155
R156
R157
R158
R159
Q34
Q35
R160
R161
R162
R163
R164
R165
C34
Q38
R181
R180
IC7
LH 0002
KO+
C35
R166
R167
C36
R186
R185
C40
IC8
R184
R191
C39
Q43
R192
R193
R194
C41
R200
KO-
R168
R169
R170
R171
R172
R173
R174
Q36
Q37
R175
R176
R177
R178
R179
R182
Q39
Q40
C37
R187
R188
R183
Q41
Q42
C38
R189
R190
R195
R196
R197
R198
R199
C42
C43
C44
C45
R207
IC4
R203
R204
R205
R206
R225
C66
Q47
R201
R202
CN3 (17)
CN2 (17)
CN1 (17)
CN1 (19)
CN2 (19)
CN3 (19)

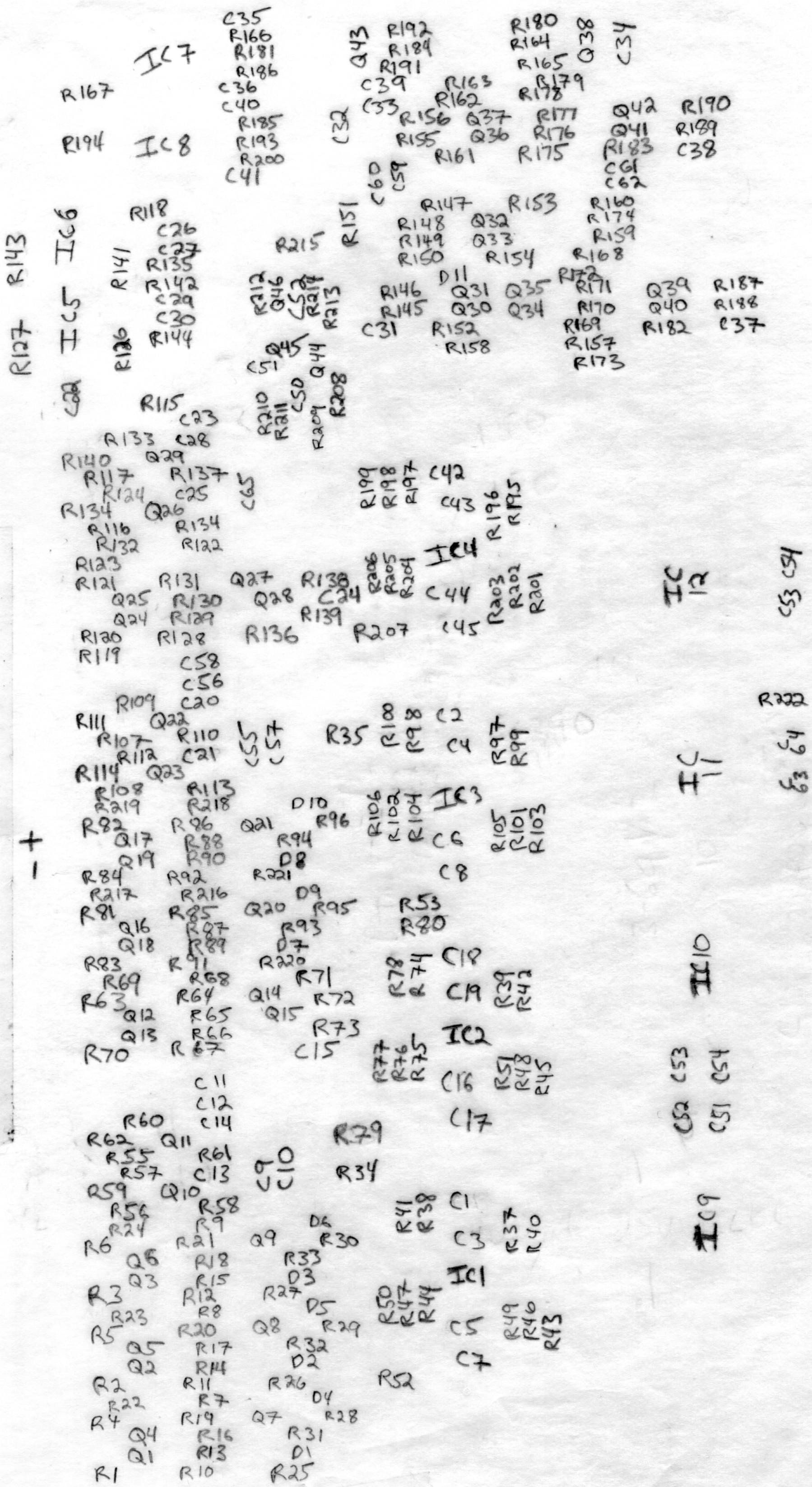
6/11/84 DG.
Colorchan-1
pg. 6 of 6



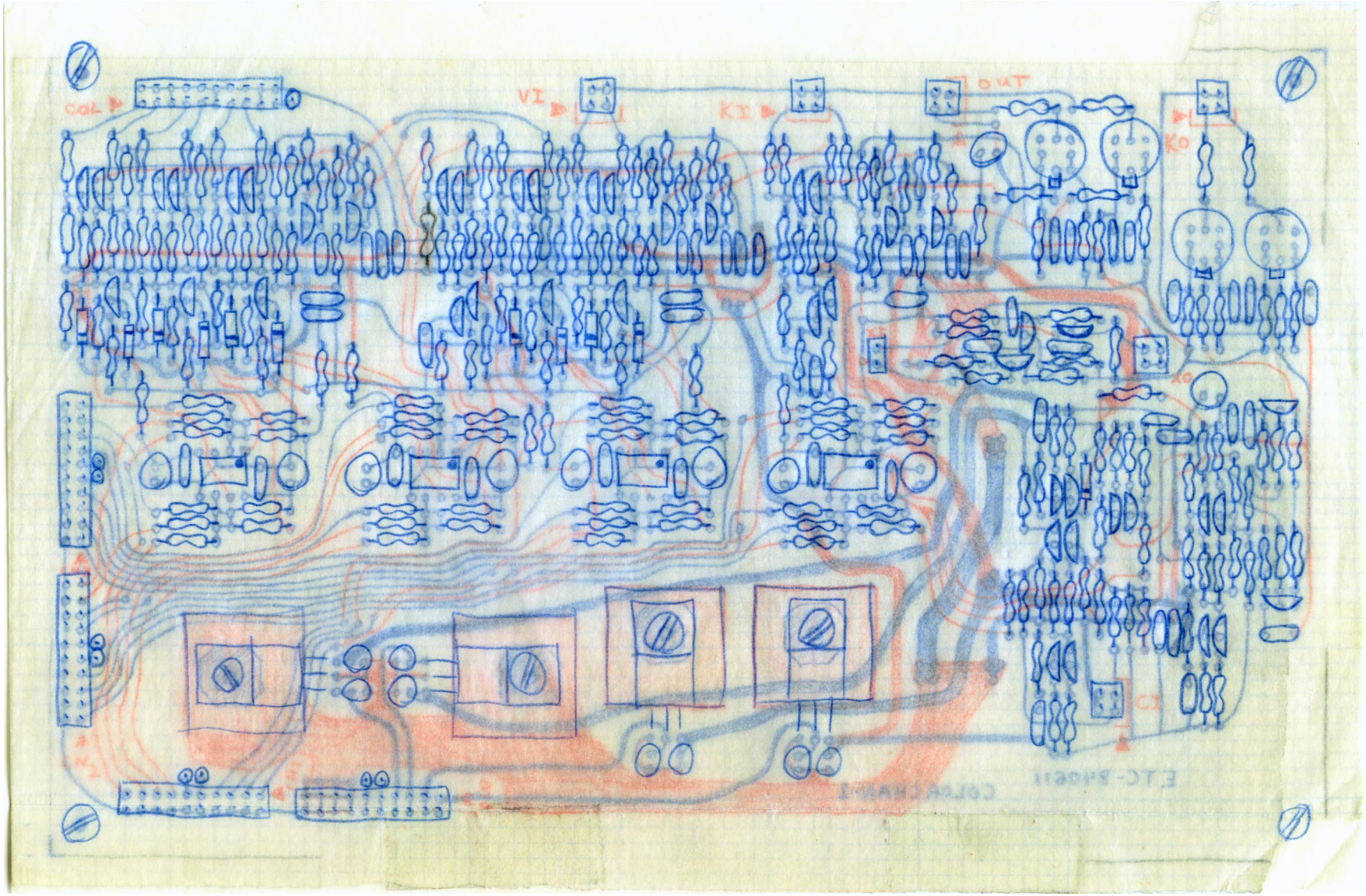


COL
VI
KI
OUT
Ko
CN1
CN2
CN3





IC7
IC8
IC6
IC5
IC4
IC3
IC2
IC1
IC9
IC10
IC11
IC12
R167
R194
C35
R166
R181
R186
C36
C40
R185
R193
R200
C41
Q43
R192
R189
R191
C39
C33
C32
R180
R164
R165
R179
R178
Q38
C34
R163
R162
R156
R155
Q37
Q36
R161
R177
R176
R175
Q42
Q41
R190
R189
R183
C38
C61
C62
C60
C59
R147
R148
R149
R150
Q32
Q33
R153
R154
R160
R174
R159
R168
R151
R215
R143
R127
R118
C26
C27
R135
R141
R142
C29
C30
R144
D11
R146
R145
Q31
Q30
Q35
Q34
R171
R170
R169
R157
R173
Q39
Q40
R182
R187
R188
C37
C31
R152
R158
Q45
Q44
C51
R208
R115
C23
R133
C28
R140
Q29
R117
R137
R124
C25
R134
Q26
R116
R132
R122
R123
R121
R131
Q25
R130
Q24
R129
R120
R128
R119
Q27
Q28
R138
C24
R139
R136
R207
C42
C43
C44
C45
R196
R195
R199
R198
R197
R203
R202
R201
C53
C54
C58
C56
C20
R109
Q22
R111
R107
R110
R112
C21
R114
Q23
R108
R113
R219
R218
C55
C57
R35
C2
C4
R97
R99
R222
C63
C64
D10
R96
Q21
R94
D8
R82
R86
Q17
R88
Q19
R90
R84
R92
R221
D9
R217
R216
R81
R85
Q20
R95
Q16
R87
Q18
R89
R93
D7
R83
R91
R220
R69
R68
R71
R63
R64
Q14
R72
Q12
R65
Q15
Q13
R66
R73
R70
R67
C15
R53
R80
C18
C19
R78
R74
R39
R42
C6
C8
R105
R101
R103
R106
R102
R104
R77
R76
R75
C16
C17
R51
R48
R45
C53
C54
C52
C51
C11
C12
C14
R60
R62
Q11
R55
R61
R57
C13
C10
R79
R34
R59
Q10
R56
R58
R24
R9
D6
R41
R38
C1
C3
R37
R40
R6
R21
Q9
R30
Q6
R18
R33
Q3
R15
D3
R3
R12
R27
R50
R47
R44
R23
R8
D5
R5
R20
Q8
R29
C5
R49
R46
R43
Q5
R17
R32
Q2
R14
D2
C7
R52
R2
R11
R26
R22
R7
D4
R4
R19
Q7
R28
Q4
R16
R31
Q1
R13
D1
R1
R10
R25
+
-


COL
VI
KI
OUT
KO
XO
C1

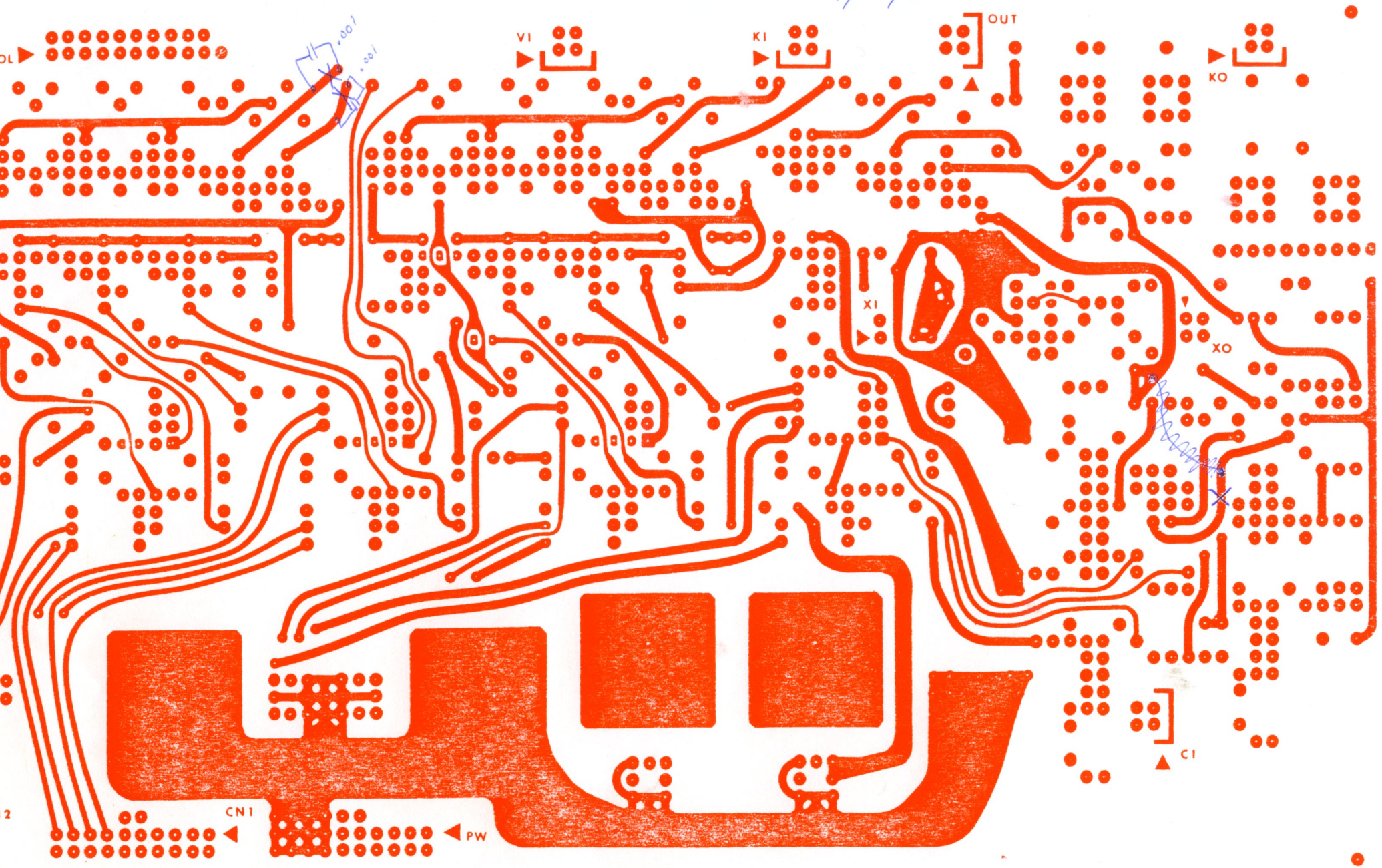
Colorchan-1

Component side

~~12/18/85~~

11/12/86

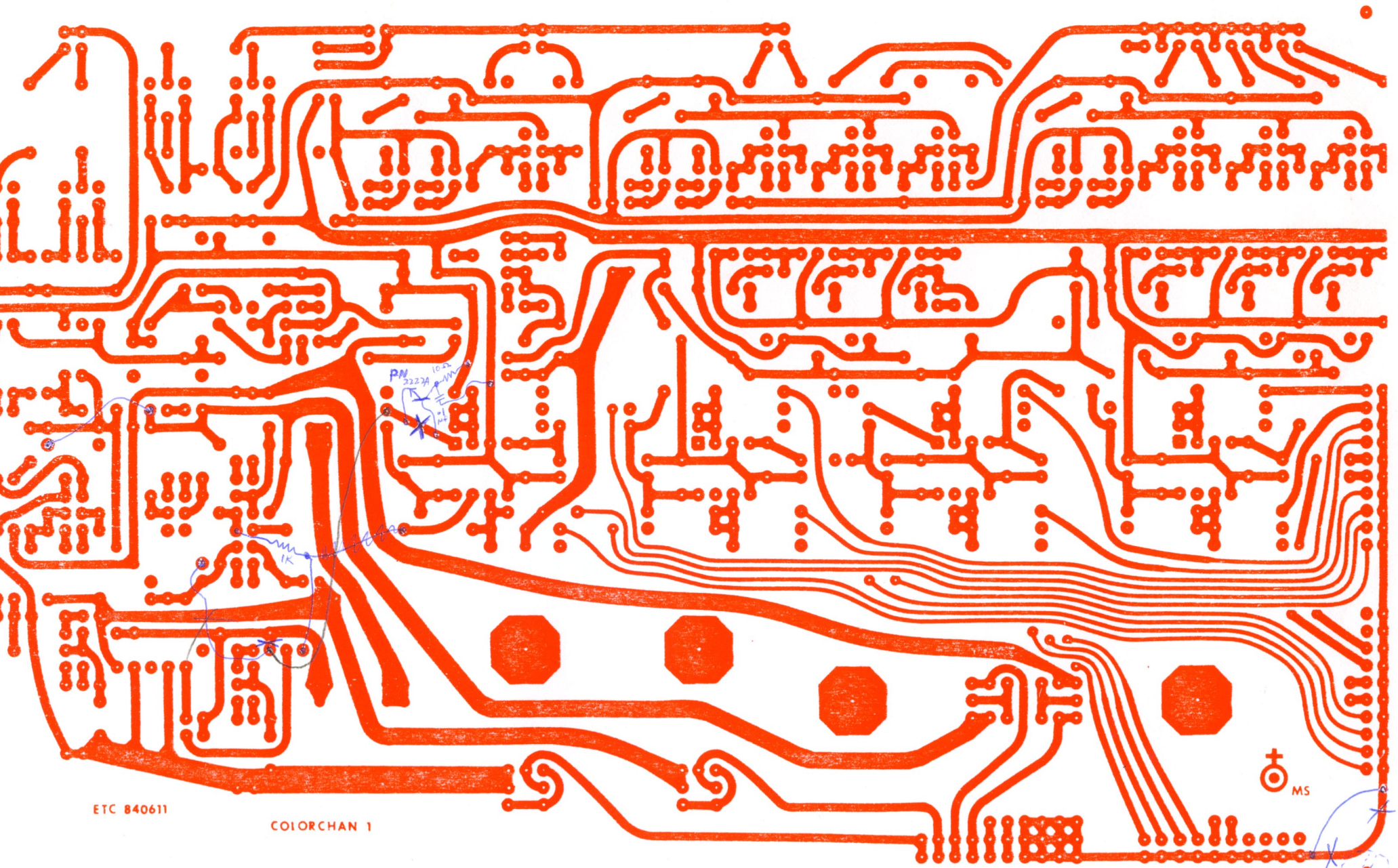
cuts & Jumpers



Colorchan-1

Solder side

11/12/86

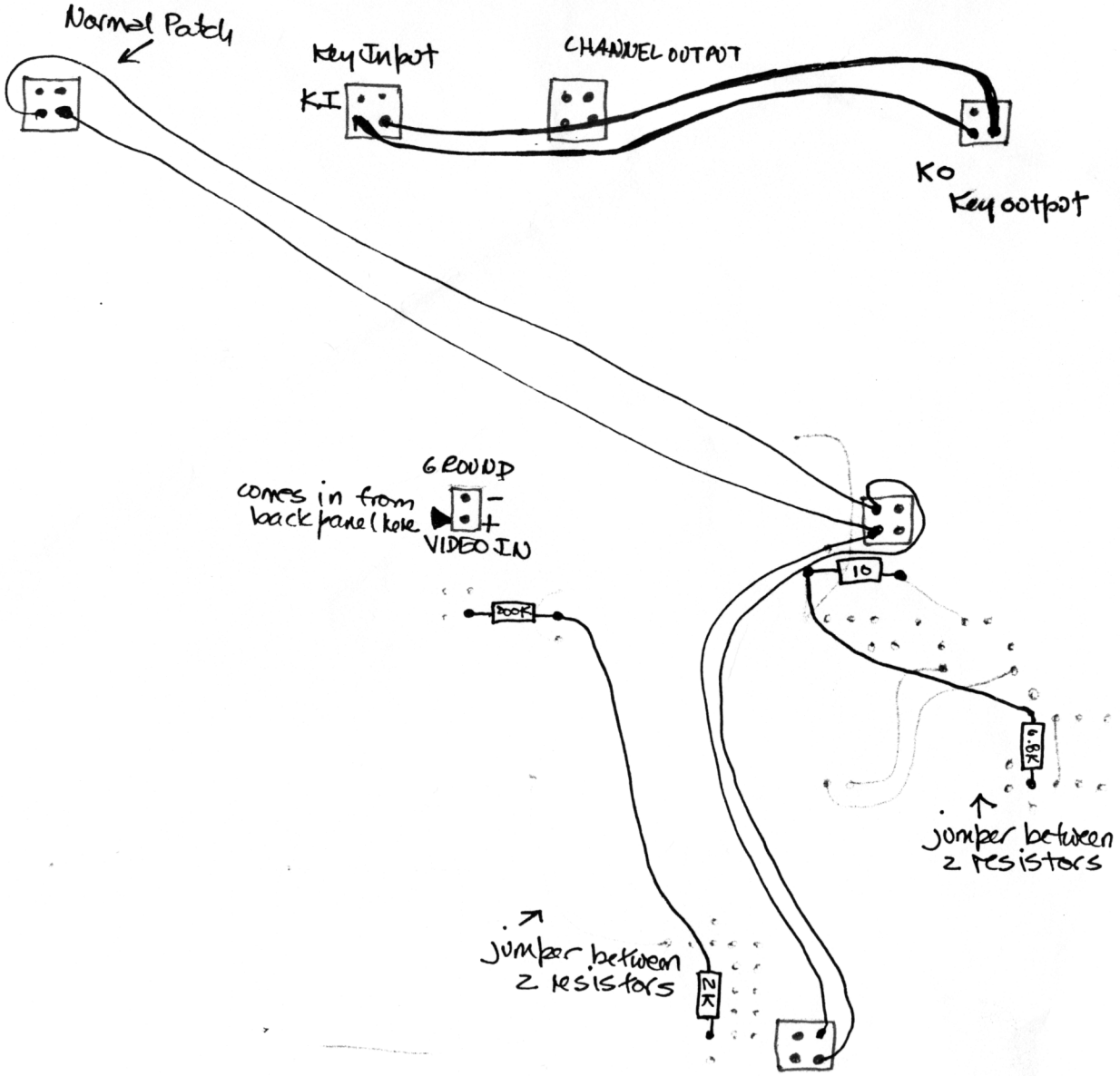


ETC 840611

COLORCHAN 1

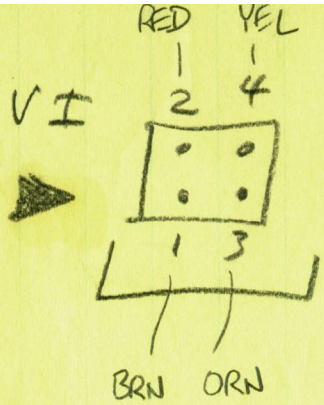
only if mounting

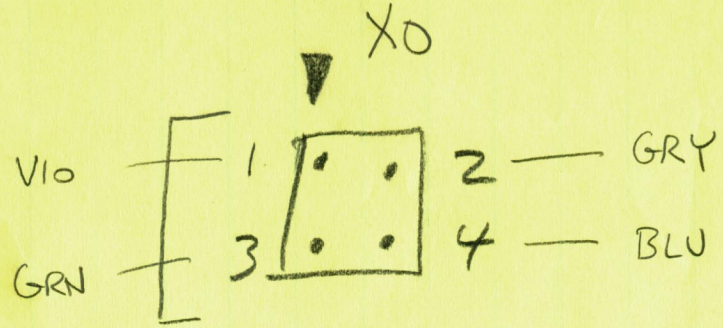
COLOR CHAN-1
COMPONENT SIDE

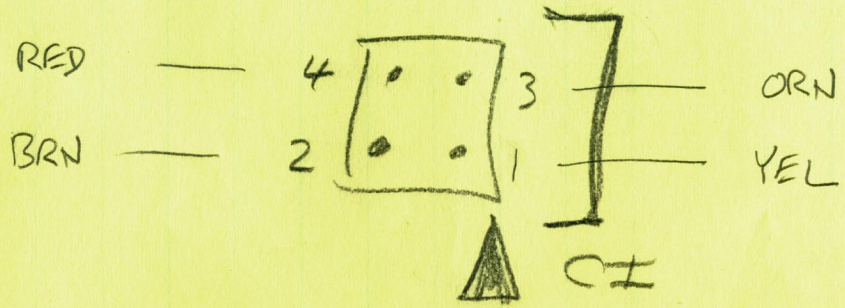


1 — VI 1
2 — VI 2
3 — VI 3
4 — VI 4
5 — XO 3
6 — XO 4
7 — XO 1
8 — XO 2
9 —
10 —
11 — CI 2
12 — CI 4
13 — CI 3
14 — CI 1

on/off ±
N/R







COLOR CHAN 1

Q		Q	QUANTITY/BOARD
4	LF 353	2	1.5K
4	LH 0002CH	2	2 K
1	LM 340T-12	10	3 K
1	LM 340T-5	6	5.1 K
1	LM 320T-5	4	10 K
1	LM 320T-12	5	20K
41	2N3904	5	56K
5	2N3906	1	75K
47	.1µf disc	28	100K
8	22µf 25V Elec	1	200K
4	.1µf 35V TANT	5	1 M
2	22µf 16V TANT	2	750
2	22µf 25V TANT	6	20 PIN HEADER
10	1N4148	2	100µf 25V
46	10 Ω	4	8 PIN DIP
4	75		
1	100		
4	150		
3	200		
1	220		
26	300		
2	330		
19	390		
4	510		
1	620		
2	820		
9	1K		

Colorchan-1 parts count

.1 — 47

100@25 — 2
22@25 — 8
2N3906 — 5
2N3904 — 41
8pin sockets — 4
LF353 — 4
LH0002CH — 4
2x10 header — 5
2x2 header — 6
2x1 header — 1

840611 PCB — 1

	(1)	(4)	(6)	(10)
10Ω	47	188	282	470
75	4	16	24	40
100	1	4	6	10
150	4	16	24	40
200	2	8	12	20
220	1	4	6	10
300	26	104	156	260
330	3	12	18	30
390	19	76	114	190
510	4	16	24	40
620	1	4	6	10
750	2	8	12	20
820	2	8	12	20
1K	9	36	54	90
1.5K	2	8	12	20
2K	2	8	12	20
3K	10	40	60	100
5.11K	6	24	36	60
10K	3	12	18	30
20K	5	20	30	50
56K	5	20	30	50
75K	1	4	6	10
100K	29	116	174	290
200K	1	4	6	10
1M	5	20	30	50
IN4148	10	40	60	100

with regulators add:

7812 — 1
7805 — 1
7905 — 1
7912 — 1

Small heatsink — 4

22μ Tantalum caps — 4
.1μ " " — 4 — (maybe make 22μ)

4/40 x ½" bolt&nut — 4

200Ω — 1

without regulators add:

100μ@25 — 4

40.8
27.3

COLORIZER

IC 1 LF 353 ✓
IC 2 LF 353
IC 3 LF 353
IC 4 LF 353
IC 5 LH 0002 CH
IC 6 LH 0002 CH
IC 7 LH 0002 CH
IC 8 LH 0002 CH

IC 9 LM 340 T-12
IC 10 LM 340 T-5
IC 11 LM 320 T-5
IC 12 LM 320 T-12

Q 1-3 2N 3904
Q 4-6 2N 3904
Q 7-9 2N 3904
Q 10 2N 3904
Q 11 2N 3904
Q 12 2N 3904
Q 13 2N 3904
Q 14 2N 3904
Q 15 2N 3904
Q 16-17 2N 3904
Q 18-19 2N 3904
Q 20-21 2N 3904
Q 22 2N 3904
Q 23 2N 3904
Q 24 2N 3904
Q 25 2N 3904
Q 26 2N 3904
Q 27 2N 3904
Q 28 2N 3904
Q 29 2N 3904
Q 30 2N 3906
Q 31 2N 3906
Q 32 2N 3906
Q 33 2N 3906
Q 34 2N 3904

p2

R 36
R 54

Q 35	2N 3904	R 37-39 56k	R74
Q 36	2N 3904	R 40-42 20k	R75 100k
Q 37	2N 3904	R 43-45 100k	R76 100k
Q 38	2N 3904	R 46-48 100k	R77 100k
Q 39	2N 3904	R 49-51 100k	R78 100k
Q 40	2N 3904	R 52-53 10	R79 10
Q 41	2N 3904	R 55 620	R80 10
Q 42	2N 3904	R 56 620	R81 1.5k R82 2k
Q 43	2N 3904	R 57 390	R83 1.5k R84 2k
Q 44	2N 3904	R 58 10	R85-86 300
Q 45	2N 3906	R 59 3k	R87-88 10
Q 46	2N 3904	R 60 390	R89-90 10
Q 47	PN 2222 *	R 61 10	R91-92 300
R 1-3	5.1 k	R 62 3k	R93-94 1k
R 4-6	5.1k	R 63 10k	R95-96 390
R 7-9		R 64 300	R97-98 56k
R 10-12	300	R 65 10	R99-100 20k
R 13-15	10	R 66 10	R101-102 100k
R 16-18	10	R 67 300	R103-104 100k
R 19-21	300	R 68	R105-106 100k
R 22-24		R 69	R107 150
R 25-27	1 MEG	R 70 10k	R108 150
R 28-30	390	R 71 220	R109 390
R 31-33	1k	R 72 200	R110 10
R 34-35	10	R 73 200	R111 3k

P. 36

COLORIZER

p3

R112	390	R137	10	R162	6.8k
R113	10	R138	300	R163	
R114	3k	R139	300	R164	390
R115	10	R140	3k	R165	10
R116	1k	R141	390	R166	10
R117	1k	R142	10 NOT IN	R167	75
R118	10	R143	75	R168	—
R119	10k	R144	10 NOT IN	R169	300
R120	1k	R145	300	R170	10
R121	1k	R146	300	R171	10
R122		R147	300	R172	300
R123	10k	R148	10	R173	—
R124	390	R149	10	R174	
R125	10	R150	300	R175	300
R126	390	R151	10	R176	10
R127	75	R152	330	R177	10
R128	300	R153	75k	R178	300
R129	10	R154	—	R179	
R130	10	R155	820	R180	3k
R131	300	R156	820	R181	390
R132		R157	150	R182	2k
R133	390	R158	100	R183	330
R134	3k	R159	150	R184	390
R135	10	R160		R185	10
R136	330	R161	510	R186	10

R187	510	R212	390	C1,2,7,8	22µf 25v
R188	510	R213	3k	C3-6	.1µf
R189	300	R214	200k	C9	.1
R190	300	R215	3k	C10	.1
R191	10	R216		C13	.1
R192	3k	R217		C14	.1
R193	390	R218		C15	.1
R194	75	R219		C16	.1
R195	100k	R220	1MEG	C17	22µf 25v ELEC
R196		R221	1MEG	C18	22µf 25v ELEC
R197		R222	200	C19	.1
R198	200k	*R223	10k BOTTOM	C20	.1
R199	10	R224	1k *BOTTOM	C21	.1
R200	10	R225	10 *	C22	100µf 25v ELEC
R201	100k			C23	.1
R202	100k			C24	.1
R203	100k			C25	.1
R204	100k			C26	.1
R205	100k			C27	.1
R206	100k			C28	.1
R207	10			C29	.1
R208	390			C30	.1
R209	10			C31	.1
R210	10k			C32	100µf 25v ELEC
D211	10			C33	.1

C11 .1
C12 .1

COLORIZER
P.5

C34	.1
C35	.1
C36	.1
C37	.1
C38	.1
C39	.1
C40	.1
C41	.1
C42	22µf 25V ELEC
C43	.1
C44	.1
C45	22µf 25V ELEC
C46	.1µf 50V OR 35V TANT.
C47	22µf 25V TANT.
C48	.1µf 35V TANT
C49	22µf 16V TANT
C50	.1
C51	.1
C52	.1
C53	.1µf 35V TANT
C54	22µf 25V TANT
C55	.1
C56	.1
C57	.1
C58	.1

D1-3	IN 4148
D4-6	IN 4148
D7-8	IN 4148
D9-10	IN 4148
D11	IN 4148

C59	.1
C60	.1
C61	.1
C62	.1
C63	.1µf 35V TANT.
C64	22µf 16V TANT.
C65	.1
C66	.1 *

COLOR CHAN 1

Q		Q	QUANTITY/BOARD
4	LF 353	2	1.5K
4	LH 0002CH	2	2 K
1	LM340T-12	10	3 K
1	LM340T-5	6	5.1 K
1	LM320T-5	4	10 K
1	LM320T-12	5	20K
41	2N3904	5	56K
5	2N3906	1	75K
47	.1µf disc	28	100K
8	22µf 25V Elec	1	200K
4	.1µf 35V TANT	5	1M
2	22µf 16V TANT	2	750
2	22µf 25V TANT	6	20 PIN HEADER
10	1N4148	2	100µf 25V
46	10 Ω	4	8 PIN DIP
4	75		
1	100		
4	150		
3	200		
1	220		
26	300		
2	330		
19	390		
4	510		
1	620		
2	820		
9	1K		

PARTS LIST - RESISTORS R1 THRU R50 PAGE 1 OF _____

Designlab

BOARD NAME Colorchan

BOARD NUMBER _____ COMMENTS _____

All resistors are ¼ watt 5% unless noted ※ = Added only if needed

SCHEMATIC NUMBER	PART NUMBER / VALUE
R1	5.1K
R2	5.1K
R3	5.1k
R4	5.1K
R5	5.1K
R6	5.1K
R7	※
R8	※
R9	※
R10	300
R11	300
R12	300
R13	10
R14	10
R15	10
R16	10
R17	10
R18	10
R19	300
R20	300
R21	300
R22	※
R23	※
R24	※
R25	1M

SCHEMATIC NUMBER	PART NUMBER / VALUE
R26	1M
R27	1M
R28	390
R29	390
R30	390
R31	1K
R32	1K
R33	1K
R34	10
R35	10
R36	X
R37	56K (when using Audio taper pots, these must be tri
R38	56K "
R39	56K "
R40	20K
R41	20K
R42	20K
R43	100K
R44	100K
R45	100K
R46	100K
R47	100K
R48	100K
R49	100K
R50	100K

PARTS LIST - RESISTORS R51 THRU R100 PAGE 2 OF _____

Designlab

BOARD NAME Colorchan

BOARD NUMBER _____ COMMENTS _____

SCHEMATIC NUMBER	PART NUMBER / VALUE
R51	100K
R52	10
R53	10
R54	X
R55	620
R56	620
R57	300
R58	10
R59	3K
R60	300
R61	10
R62	3K
R63	20K
R64	300
R65	10
R66	10
R67	300
R68	·X·
R69	·X·
R70	20K
R71	220
R72	200
R73	200
R74	·X·
R75	100K

SCHEMATIC NUMBER	PART NUMBER / VALUE
R76	100K
R77	100K
R78	100K
R79	10
R80	10
R81	1.5K
R82	2K (10pf on top)
R83	1.5K
R84	2K (10pf on top)
R85	300
R86	300
R87	10
R88	10
R89	10
R90	10
R91	300
R92	300
R93	1K
R94	1K
R95	390
R96	390
R97	56K (needs trimming Audio taper pots usd
R98	56K "
R99	20K
R100	20K

PARTS LIST - RESISTORS R100 THRU R150 PAGE 3 OF _____

Designlab

BOARD NAME Colorchan

BOARD NUMBER _____ COMMENTS _____

SCHEMATIC NUMBER	PART NUMBER / VALUE
R101	100K
R102	100K
R103	100K
R104	100K
R105	100K
R106	100K
R107	150
R108	150
R109	300
R110	10
R111	3K
R112	300
R113	10
R114	3K
R115	10
R116	1K
R117	1K
R118	10
R119	10K
R120	1K (47pf on top)
R121	1K "
R122	※ (maybe 120K)
R123	10K
R124	300
R125	10

SCHEMATIC NUMBER	PART NUMBER / VALUE
R126	300
R127	75
R128	300
R129	10
R130	10
R131	300
R132	12K
R133	300
R134	3K
R135	10
R136	330
R137	10
R138	300
R139	300
R140	3K
R141	300
R142	10
R143	75
R144	10
R145	300
R146	300
R147	300
R148	10
R149	10
R150	300

PARTS LIST - RESISTORS R151 THRU R200 PAGE 4 OF _____

Designlab

BOARD NAME Colorchan

BOARD NUMBER _____ COMMENTS _____

SCHEMATIC NUMBER	PART NUMBER / VALUE
R151	10
R152	330
R153	75K
R154	X
R155	820
R156	820
R157	750
R158	100
R159	750
R160	*
R161	510
R162	6.8K
R163	*
R164	300
R165	10
R166	10
R167	75
R168	X
R169	300
R170	10
R171	10
R172	300
R173	X
R174	*
R175	300

SCHEMATIC NUMBER	PART NUMBER / VALUE
R176	10
R177	10
R178	300
R179	*
R180	3K
R181	300
R182	2K
R183	330
R184	300
R185	10
R186	10
R187	510
R188	510
R189	300
R190	300
R191	10
R192	3K
R193	300
R194	75
R195	100K
R196	*
R197	*
R198	200K
R199	10
R200	10

PARTS LIST - RESISTORS R200 THRU R250 PAGE 5 OF _____

Designlab

BOARD NAME Colorchan

BOARD NUMBER _____ COMMENTS _____

SCHEMATIC NUMBER	PART NUMBER / VALUE
R201	100K
R202	100K
R203	100K
R204	100K
R205	100K
R206	100K
R207	10
R208	300
R209	10
R210	10K
R211	10
R212	300
R213	3K
R214	1M
R215	3K
R216	
R217	
R218	
R219	
R220	1M
R221	1M
R222	200
R223	
R224	1K
R225	10

SCHEMATIC NUMBER	PART NUMBER / VALUE
R226	
R227	
R228	
R229	
R230	
R231	
R232	
R233	
R234	
R235	
R236	
R237	
R238	
R239	
R240	
R241	
R242	
R243	
R244	
R245	
R246	
R247	
R248	
R249	
R250	

PARTS LIST - CAPACITORS C1 THRU C50 PAGE _____ OF _____

Designlab

BOARD NAME Colorchan

BOARD NUMBER _____ COMMENTS _____

Alum = Aluminum Electrolytic Tant = Tantalum

SCHEMATIC NUMBER	PART NUMBER / VALUE
C1	22µf @ 25v (Alum)
C2	22µf @ 25v "
C3	.1 µf
C4	.1
C5	.1
C6	.1
C7	22µf @ 25v (Alum)
C8	22 µf @ 25v "
C9	.1
C10	.1
C11	.1
C12	.1
C13	.1
C14	.1
C15	.1
C16	.1
C17	22 µf @ 25v (Alum)
C18	22 µf @ 25 "
C19	.1
C20	.1
C21	.1
C22	100µf @ 25v (Alum)
C23	.1
C24	.1
C25	.1

SCHEMATIC NUMBER	PART NUMBER / VALUE
C26	.1
C27	.1
C28	.1
C29	.1
C30	.1
C31	.1
C32	100µf @ 25v (Alum)
C33	.1
C34	.1
C35	.1
C36	.1
C37	.1
C38	.1
C39	.1
C40	.1
C41	.1
C42	22µf @ 25v (Alum)
C43	.1
C44	.1
C45	22µf @ 25v (Alum)
C46	.1 @ 35v (tant) OR (22µf Alum.)
C47	22µf @ 25v (Tant or Alum)
C48	.1 @ 35v (tant) OR (22µf Alum)
C49	22µf @ 16v (Tant or Alum)
C50	.1

PARTS LIST - CAPACITORS C51 THRU C100 PAGE _____ OF _____

Designlab

BOARD NAME Colorchan

BOARD NUMBER _____ COMMENTS _____

SCHEMATIC NUMBER	PART NUMBER / VALUE
C51	.1
C52	.1
C53	.1 @ 35v (Tant) OR (22 mf Alum)
C54	22 mf @ 25v (Tant or Alum)
C55	.1
C56	.1
C57	.1
C58	.1
C59	.1
C60	.1
C61	.1
C62	.1
C63	.1 @ 35v (Tant) or (22 mf Alum)
C64	22 mf @ 16v (Tant or Alum)
C65	.1
C66	.1
C67	
C68	
C69	
C70	
C71	
C72	
C73	
C74	
C75	

SCHEMATIC NUMBER	PART NUMBER / VALUE
C76	
C77	
C78	
C79	
C80	
C81	
C82	
C83	
C84	
C85	
C86	
C87	
C88	
C89	
C90	
C91	
C92	
C93	
C94	
C95	
C96	
C97	
C98	
C99	
C100	

PARTS LIST - I.C.'S IC1 THRU IC50 PAGE _____ OF _____

Designlab

BOARD NAME Colorchan

BOARD NUMBER _____ COMMENTS _____

SCHEMATIC NUMBER	PART NUMBER / VALUE
IC1	LF353
IC2	LF353
IC3	LF353
IC4	LF353
IC5	LH0002CH
IC6	LH0002CH
IC7	LH0002CH
IC8	LH0002CH
IC9	LM340T-12
IC10	LM340T-5
IC11	LM320T-5
IC12	LM320T-12
IC13	
IC14	
IC15	
IC16	
IC17	
IC18	
IC19	
IC20	
IC21	
IC22	
IC23	
IC24	
IC25	

SCHEMATIC NUMBER	PART NUMBER / VALUE
IC26	
IC27	
IC28	
IC29	
IC30	
IC31	
IC32	
IC33	
IC34	
IC35	
IC36	
IC37	
IC38	
IC39	
IC40	
IC41	
IC42	
IC43	
IC44	
IC45	
IC46	
IC47	
IC48	
IC49	
IC50	

PARTS LIST - TRANSISTORS Q1 THRU Q50 PAGE _____ OF _____

Designlab

BOARD NAME Colorchan

BOARD NUMBER _____ COMMENTS _____

SCHEMATIC NUMBER	PART NUMBER / VALUE
Q1	2N3904
Q2	"
Q3	"
Q4	"
Q5	"
Q6	"
Q7	"
Q8	"
Q9	"
Q10	"
Q11	"
Q12	"
Q13	"
Q14	"
Q15	"
Q16	"
Q17	"
Q18	"
Q19	"
Q20	"
Q21	"
Q22	"
Q23	"
Q24	"
Q25	"

SCHEMATIC NUMBER	PART NUMBER / VALUE
Q26	2N3904
Q27	"
Q28	"
Q29	"
Q30	2N3906
Q31	"
Q32	"
Q33	"
Q34	2N3904
Q35	"
Q36	"
Q37	"
Q38	"
Q39	"
Q40	"
Q41	"
Q42	"
Q43	"
Q44	"
Q45	2N3906
Q46	2N3904
Q47	PN2222A
Q48	
Q49	
Q50	

PARTS LIST - Misc

PAGE _____ OF _____

Designlab

BOARD NAME Colorchan

BOARD NUMBER _____

COMMENTS _____

SCHEMATIC NUMBER	PART NUMBER / VALUE
D1	IN4148
D2	"
D3	"
D4	"
D5	"
D6	"
D7	"
D8	"
D9	"
D10	"
D11	"

SCHEMATIC NUMBER	PART NUMBER / VALUE